

25/29 - (C) WPI / DERWENT

AN - 1988-358569 [25]

AP - JP19870105816 19870428; JP19870105816 19870428; [Based on J63270708]

PR - JP19870105816 19870428

TI - Water-soluble cationic (meth)acrylic polymer prodn. - useful as coagulants for industrial waste and sewage water

IW - WATER SOLUBLE CATION METHO ACRYLIC POLYMER PRODUCE USEFUL COAGULATE INDUSTRIAL WASTE SEWAGE WATER

PA - (DAII) DAIICHI KOGYO SEIYAKU CO LTD

PN - JP63270708 A 19881108 DW198850 013pp

- JP7010895B B2 19950208 DW199510 C08F20/34 009pp

IC - C08F2/10 ; C08F2/48 ; C08F6/00 ; C08F20/34 ; C08F20/56 ; C08J3/12 ; C08J3/28

AB - J63270708 Mfr. of a graded cationic (meth)acrylic polymer of good water-solubility involves polymerising aq. soln. of a mixt. of cationic (meth)acrylic monomers or a mixt. of cationic (meth)acrylic monomers and other water-soluble (meth)acrylic monomers and grading the resultant polymer. Improvement comprises reducing the dissolved oxygen content of an aq. soln. of homogeneous mixt. of monomer aq. soln. with pH of 4-7 contg. in total 60-80 wt.% monomers and 0.001-1 wt.% of at least 1 nonionic surfactant, 0.0005-0.3 wt.% of a photopolymerisation initiator (except water-soluble azo photopolymerisation initiators) and 0.0025-0.6 wt.% of a water-soluble azo photopolymerisation initiator on the basis of the total monomers to at most 1 mg/litre, feeding the aq. soln. on a moving belt with a resultant thickness of 3-18 mm in an atmosphere contg. at most 1 vol.% oxygen, irradiating with light of 300-450 nm for 30-60 min at 10-15 W/m² and for 30-60 min., at 20-30 W/m² in two steps, continuously removing the polymerised hard rubber-like polymer gel sheet from the belt, and irradiating the removed polymer gel sheet with a light at 200-600 nm for 1-6 min. at 1000-2000 W/m². The polymer gel sheet is then cut into cubes with a roller cutter with a side length of 3-18 mm with the polymer content being kept at 60-85 wt.%. The cubes are cut into fine particles with a dia. of 0.3-3 mm with a vertical cutter with the polymer content being kept at 60-85 wt.%. The particles are then dried with hot air.

- USE/ADVANTAGE - Fine particles of cationic (meth)acrylic polymer useful as coagulants for industrial waste and sewage water.

2 steps same λ (300-450 nm)
different intensity (W/m²)